UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/062,139	02/01/2002	James E. DeGrange JR.	430	2518

47372 7590 07/27/2005

BIRCH, STEWART, KOLASCH & BIRCH, LLP
8110 GATEHOUSE ROAD
SUITE 100 EAST
FALLS CHURCH, VA 22042-1248

EXAMINER	
TRAN, DZUNG D	

ART UNIT	PAPER NUMBER
2638	

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/062,139	DEGRANGE, JAMES E.	
	Examiner	Art Unit	
	Dzung D. Tran	2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 February 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bai U.S. Patent no. 6,735,395.

Regarding claims 1, 5 and 9, Bai discloses in figure 3, a method for coordinating channel power information in a wavelength division multiplexed optical communications system having at least a first and a second network element, the method comprising:

a microprocessor controller 450 for gathering information from detectors 433, 443 on local communications assets local to the first network element 400 including launch path power values and channel information of the wavelength division multiplexed channels output from the first network element (col. 7, lines 32-37);

determining channel power value (equivalent to channel weighting values) for the wavelength division multiplexed channels output from the first network element based on the launch path power values and the channel information (col. 5, line 65 to col. 6, line 6). Bai differs from claims 1, 5 and 9 of the present invention in that Bai does not specifically disclose for transmitting the channel weighting values from the first network element to the second network element.

Condict from the same field of endeavor, discloses a span management system having service channel (col. 3, line 34) that carrying the channel information from the first network element 20 to the second network element 30.

At the time of the invention was made, it would have been obvious to a person of ordinary skill to the teaching of Condict in the WDM optical communications system of Bai. One of ordinary skill in the art would have been motivated to do that in order to transmit the supervisory channel or control channel that includes the channel information to the other network nodes. Thus it improves the network monitoring and controlling.

Regarding claim 4, Bai further discloses the first network element 300 is capable of injecting at least one channel (e.g., one of the WDM sources 301) into the network, and controlling the launch power of the at least one injected channel according to the launch path power values (figure 3, col. 5, line 65 to col. 6, line 6).

Regarding claim 6, Bai discloses the controlling step including adjusting a variable optical attenuator 311 in the launch path of the at least one channel according to the launch power settings, see figure 3.

Regarding claim 7, Bai discloses the controlling including adjusting an output power of a transmitter (e.g., WDM source 301) transmitting the at least one channel according to the launch power settings, see figure 3.

Regarding claim 11, Bai further discloses storing the launch path power values, the channel weighting values, and the channel information in a database operatively connected to the first network element and said gathering step accessing the database

to gather information on local communications assets local to the first network element (col. 7, lines 32-37).

Regarding claims 2, 3 and 8, Condict discloses service channel (col. 3, line 34) for carrying diagnostic and span topology (see col. 3, 34-37, e.g., equivalent to channel frequency, channel format (e.g., SONET format, col. 3, line 6) and data rate (e.g., data rate at 2.5 Gbps is well recognized in the SONET system) information for the channels or network topology information (col. 3, line 37) to the network elements including channel source and channel block information (col. 4, line 39-40) for each of the channels and connectivity between the network elements. Furthermore, whether or not to have the supervisory channel to carry a channel frequency, channel format and data rate information for the channels or network topology information to the network elements including channel source and channel block information for each of the channels and connectivity between the network elements is obviously an engineering design choices.

Regarding claim 10, Condict discloses the WDM network is a SONET network (col. 3, line 4) and a 2.5 Gbps WDM channel is well recognized in the SONET system.

Regarding claims 12 and 20, Bai discloses in figure 3, a method for using coordinated channel power information in a network element of a wavelength division multiplexed optical communications system carrying a plurality of channels, the method comprising:

a microprocessor controller 450 for receiving channel weighting values and channel information for wavelength division multiplexed channels generated upstream of the network element (col. 7, lines 32-37);

calculating a reference value according to channel weighting values corresponding to the set of in-view channels (col. 5, line 65 to col. 6, line 6); and

utilizing the reference value as a basis for managing at least a portion of the network element corresponding to the point though which the in-view channels pass (col.7, lines 32-37).

Bai differs from claims 12 and 20 of the present invention in that Bai does not specifically disclose for determining a set of in-view channels that are passing through a point in the network element based on the channel information. Condict discloses the SCM 22, NCP 24 for determining a set of in-view channels that are passing through a point in the network element based on the channel information, see figure 2, col. 3, line 63 to col. 4, line 30.

Regarding claims 13 and 14, Bai further discloses each channel is modulated with different frequencies (f1, f2, ..., fn) so that the upstream receiver can be identify the correspond channel (col. 7, lines 4-15).

Regarding claims 15-17, Condict discloses for each communication channel, the network element can includes one or more "sources, sinks and blocks, see col. 4, line 31 to col. 5, line 27.

Regarding claim 18, Condict discloses the SCM based on the channel information to determine whether channels are enabled or not so (col. 5, lines 11-27).

Regarding claim 19, Condict discloses step triggering an alarm condition when a fault, such as fiber break occur (col. 6, lines 20-31).

Regarding claim 21, Condict discloses the network include amplifier 44 and a microprocessor controller 450 for determining a set of channel that are passing though the optical amplifier (col. 7, lines 32-37);

calculating a reference value according to channel weighting values corresponding to the set of in-view channels (col. 5, line 65 to col. 6, line 6); and

utilizing step controlling amplifier gain (col.7, lines 32-37).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Roberts U.S. Patent no. 6,031,647. Stable power control for optical transmission system.

b. Khaleghi et al. U.S. Patent no. 6,040,933. Method and apparatus for channel equalization in wavelength division multiplexed system

c. Cheng et al. U.S. Patent no. 6,151,336. Time division multiplexing expansion subsystem

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dzung D Tran whose telephone number is (571) 272-3025. The examiner can normally be reached on 9:00 AM - 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye, can be reached on (571) 272-3078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dzung Tran
07/22/2005